10/519845

(12) INTERNATIONAL A





(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 5 February 2004 (05.02.2004)

PCT

(10) International Publication Number WO. 2004/011657 A1

(51) International Patent Classification⁷: 9/50, A23L 1/29

C12N 15/82,

France [CA/CA]; 1309 avenue de la Ronde, Québec, Québec G1J 4C1 (CA).

(21) International Application Number:

PCT/CA2003/001146

(74) Agent: OGILVY RENAULT; Suite 1600, 1981 McGill College Avenue, Montréal, Québec H3A 2Y3 (CA).

(22) International Filing Date:

29 July 2003 (29.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/398,783

29 July 2002 (29.07.2002)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (for all designated States except US): UNI-VERSITÉ LAVAL [CA/CA]; Cité Universitaire, Québec.

Québec G1K 7P4 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MICHAUD, Dominique [CA/CA]; 965 avenue Bégin, Québec, Québec G1S 3J3 (CA). RIVARD, Daniel [CA/CA]; 3686 rue Pélissier, apt. 23, Sainte-Foy, Québec G1X 3W8 (CA). ANGUENOT, Raphaël [CA/CA]; 3065 rue Lemieux, Québec, Québec G1P 4N6 (CA). TRÉPANIER, Sonia [CA/CA]; 314 rue de la Seine, Saint-Nicolas, Québec G7A 2P8 (CA). VÉZINA, Louis-Philippe [CA/CA]; 206 route 138, Neuville, Québec G0A 2R0 (CA). BRUNELLE,

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR ENHANCING THE NUTRITIVE VALUE OF PLANT EXTRACT

(57) Abstract: The present invention relates to a method for increasing the stability of endogenous proteins recovered from plant cells or plants. The preservation of endogenous proteins integrity of endogenous protein occurs by neutralizing proteolysis in crude extracts, particularly by the use of genetic alteration of plant cells or plants that express recombinant protease inhibitors or altered activity of specific target proteases.